

Listing of the Claims:

1. (Currently amended) An automatic driving position adjustment system for use in a vehicle, comprising:

- (a) a first adjustable component adjustable by an operator, the first adjustable component configured to adjust in a plurality of bi-directions;
- (b) a plurality of additional adjustable components each ~~having~~ configured to adjust in a plurality of adjustment directions bi-directions;
- (c) a controller configured to receive vehicle signals and determine at least an interlocked state, wherein the vehicle ~~cannot be moved~~ is not moving, and a non-interlocked state, wherein the vehicle ~~can be moved~~ is moving, from the vehicle signals;
- (d) ~~at least one a plurality of movement-distance sensors, one~~ movement-distance sensor that ~~senses the distance~~ associated with each bi-direction that the first adjustable component moves in a plurality of adjustment directions when adjusted by the operator and can move, wherein the movement-distance sensors each generates an output signal indicative of the a distance and direction moved to achieve a new position of the first adjustable component, wherein the controller, when in the interlocked state, is responsive to the output signal of the at least one movement-distance sensor sensors and is configured to compute a distance that new position of each of the plurality of additional adjustable components are to move in the plurality of adjustment directions on the basis of the distance moved by new position of the first adjustable component, and based on each new position, calculates the distance and direction each movement-distance sensor must move its associated additional adjustable component to achieve the new position, and wherein the controller, when in the non-interlocked state, is not responsive to the output signal of the at least one movement-distance sensor; and
- (e) ~~a plurality of motors, motor associated with each bi-direction of each~~ adjustable component, wherein the controller actuates each of which is actuated by the controller the motors associated with the additional adjustable components when in the interlocked state and is drivingly engaged to one of the plurality of, to move the additional adjustable components to move in the plurality of adjustment directions of the additional adjustable component the distance as computed by the controller in the calculated direction the calculated distance to obtain the new positions.

2. (Currently amended) The automatic driving position adjustment system of Claim 1, wherein the first adjustable component is a driver's seat having three movement-distance sensors, and the additional adjustable components are selected from the group consisting of: a steering wheel having two movement-distance sensors, a right door mirror having two movement-distance sensors, a left door mirror having two movement-distance sensors, and an interior mirror ~~and pedal~~ having two movement distance sensors.

3. (Currently amended) The automatic driving position adjustment system of Claim 1, wherein the controller is further configured to compute the distance and the direction to obtain the desired new position by multiplying a prescribed coefficient by the distance and the direction that the first adjustable component has moved, each prescribed coefficient based on a predetermined relationship between each additional adjustable component and the first adjustable component.

4. (Canceled).

5. (Currently amended) The automatic driving position adjustment system of Claim 1, wherein the interlocked state occurs when one or more of the vehicle speed is zero, the position of the shift lever is in park, the position of the shift lever is neutral, and the parking brake is on and the non-interlocked state occurs when all of the vehicle speed is not zero, the position of the shift lever is not in park, the position of the shift lever is not in neutral and the parking brake is off.

6. (Previously presented) The automatic driving position adjustment system of Claim 1, wherein the first adjustable component is a first mirror surface that moves through a range of angular positions when adjusted by an operator; and the additional adjustable components include at least a second mirror surface that is adjustable through a range of angular positions; wherein the movement-distance sensor output is indicative of the change in the angular position of the first mirror surface.

7. (Currently amended) A vehicle, comprising:

(a) ~~— a first adjustable component;~~

~~(b) — a first motor adapted to move the first adjustable component in response to an operator-actuated signal;~~

~~(c) — a movement-distance sensor operatively coupled to the first motor and adapted to output a signal representative of the distance that the first motor moves the first adjustable component in response to the operator-actuated signal;~~

~~(d) — a plurality of additional adjustable components, each having a plurality of adjustment directions;~~

~~(e) — a controller configured to determine at least an interlocked state wherein the vehicle is stopped and a non-interlocked state wherein the vehicle is moving and to be responsive to the output signal of the movement-distance sensor when in the interlocked state, the controller configured to compute a distance that the plurality of additional adjustable components are to move on the basis of the distance moved by the first adjustable component; and~~

~~(f) — a plurality of additional motors actuated by the controller when in the interlocked state and each drivingly engaged to one of the plurality of additional adjustable components to move the additional adjustable components the distance as computed by the controller~~ the automatic driving position adjustment system of claim 1.

8. (Currently amended) The vehicle of Claim 7, wherein the first adjustable component is a driver's seat, and the plurality of additional adjustable components are selected from the group consisting of: a steering wheel, a right door mirror, a left door mirror and an interior mirror, and pedal.

9. (Currently amended) The vehicle of Claim 7 wherein the controller is further configured to compute the distance and the direction to obtain the desired new position by multiplying a prescribed coefficient by the distance and the direction that the first adjustable component has moved, each prescribed coefficient based on a predetermined relationship between each additional adjustable component and the first adjustable component.

10. (Canceled).

11. (Previously presented) The vehicle of Claim 7, wherein the interlocked state occurs when one or more of vehicle speed is zero, the position of the shift lever is in park, the position of the shift lever is neutral, and the parking brake is on.

12. (Original) The vehicle of Claim 7 wherein the first adjustable component is a first mirror surface; wherein the first motor rotates the first mirror through an angular distance; and wherein the movement-distance sensor output is indicative of the angular distance.

13. (Currently amended) An automatic driving position adjustment system for use in a vehicle, comprising:

(a) a first adjustable component wherein the first component relates to the attitude of a driver and is movable by the driver in a plurality of bi-directions during a series of adjustment cycles;

(b) a plurality of additional adjustable components each having configured to move in a plurality of adjustment directions bi-directions;

(c) movement-distance detecting means for detecting the each distance and direction of the plurality of bi-directions that the first adjustable component ~~has~~ is moved from its position during the previous adjustment cycle to its position in the current adjustment cycle;

(d) control means for determining an interlocked state wherein the vehicle is not moving and a non-interlocked state wherein the vehicle is moving and, when in the interlocked state, computing ~~the distance that a new position for each of the plurality of additional adjustable components are to move~~ on the basis of the each distance and direction moved by the first adjustable component as detected by the movement distance detecting means and computing each direction and distance necessary to move each additional adjustable components to obtain the new position; and

(e) drive means for moving the plurality of additional adjustable components ~~by the distance the directions and associated distances to obtain the new position~~ as computed by the control means.

14. (Currently amended) The automatic driving position adjustment system

of Claim 13, wherein the first adjustable component is a driver's seat, and the additional adjustable components are selected from the group consisting of: a steering wheel, a right door mirror, a left door mirror and an interior mirror, ~~and pedal~~.

15. (Currently amended) The automatic driving position adjustment system of Claim 13, wherein the control means computes the each distance and direction to move each additional adjustment component by multiplying a prescribed coefficient by the distance and direction moved by the first adjustable component as detected by the movement distance detecting means, each prescribed coefficient based on a predetermined relationship between each additional adjustable component and the first adjustable component.

16. (Canceled).

17. (Previously presented) The automatic driving position adjustment system of Claim 13, wherein the interlocked state is selected when one or more of vehicle speed is zero, the position of the shift lever is in park, the position of the shift lever is in neutral, and the parking brake is on.

18. (Previously presented) The automatic driving position adjustment system of Claim 13, wherein the first adjustable component is a first mirror surface adjustable about an angle and one of the additional adjustable components is a second mirror surface, wherein the movement-distance detecting means detects the angle that the first mirror is rotated.

19. (Currently amended) A method for use in a vehicle to automatically adjust the position of a plurality of additional adjustable components in a plurality of adjustment directions bi-directions in response to the operator-actuated adjustment of a first adjustable component, comprising:

(a) detecting the each direction and an associated distance of operator-actuated adjustment for each of the plurality of bi-directions to achieve a new position of the first adjustable component;

(b) determining an interlocked state wherein the vehicle is not moving or a

non-interlocked state wherein the vehicle is moving;

(c) when the interlocked state is determined, computing ~~the distance~~ a new position of each additional adjustable component corresponding to the new position of the first adjustable component, each new position requiring directions and associated distances of adjustment for each of the plurality of bi-directions that the plurality of additional adjustable components are to undergo on the basis of the detected ~~amount~~ of adjustment of the first adjustable component; and

(d) moving the additional adjustable components by the each direction and associated distance of adjustment required to obtain its new position.

20. (Currently amended) The method of claim 19, wherein the first adjustable component is a driver's seat, and the detected direction and associated distance of adjustment is measured as the direction and distance traveled by the seat in a first bi-direction, the direction and distance traveled by the seat in a second bi-direction, and the direction and distance traveled by the seat back.

21. (Currently amended) The method of claim 19, wherein the first adjustable component is a mirror surface that is adjustable by rotation, and the detected direction and associated distance of adjustment is measured as an angle through which the mirror is rotated.

22. (Currently amended) The method of claim 19, wherein the additional adjustable components are selected from the group consisting of: a steering wheel, a right door mirror, a left door mirror and an interior mirror, and pedal.

23. (Currently amended) The method of Claim 19, wherein the step of computing the ~~distance~~ directions and associated distances of adjustment further comprises multiplying a prescribed coefficient by the each detected direction and associated distance of adjustment of the first adjustable component.

24. (Canceled).

25. (Previously presented) The method of claim 19, wherein the interlocked state is determined when one or more the vehicle speed is zero, the position of the shift lever is in park, the position of the shift lever is in neutral, and the parking brake is functional.